

# NEW JERSEY GEOLOGICAL AND WATER SURVEY



# **Technical Memorandum 17-1**

# HIGHEST ELEVATIONS BY COUNTY IN NEW JERSEY



New Jersey Department of Environmental Protection

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**Cover photo:** Highest point in New Jersey in High Point State Park, Montague Township, Sussex County. *Photo by A. Petriman* 

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## New Jersey Geological and Water Survey Open-File Report 17-1

# **Highest Elevations by County in New Jersey**

by

Alexandra Petriman

New Jersey Department of Environmental Protection New Jersey Geological and Water Survey P.O. Box 420, Mail Code 29-01 Trenton, NJ 08625

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#### INTRODUCTION

This report describes the highest natural elevations ("high points") in each county of New Jersey and the method by which they were located. Two sets of high points were identified; one set of absolute high points and one set of high points on publicly-accessible land (figure 1). Ownership determination was provided by tax parcel data and state and county open space geographic information system (GIS) layers. Five of the 21 counties have landfills as their highest elevation. Due to the fact that these elevations can change substantially over short periods of time, they are not regarded as absolute high points in this report.

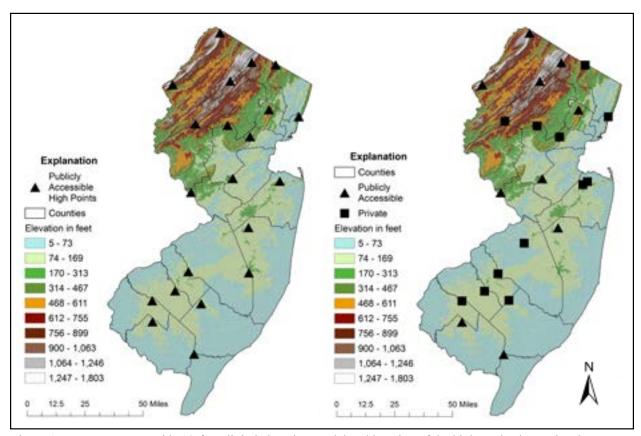


Figure 1. New Jersey statewide 10-foot digital elevation model and location of the highest absolute points by county, *left*, and the statewide 10-foot digital elevation model and location of the highest absolute points on publicly-accessible land by county, *right*.

#### METHODOLOGY

The statewide 10-foot digital elevation model (DEM) (figure 1) is the latest statewide elevation model in New Jersey. It provides elevation above sea level at a 10-foot horizontal resolution. The model is displayed using Esri ArcGIS, GIS software that uses geographic data to create maps and analyze geographic information. The highest elevations of each county can be extracted from the 10-foot DEM using ArcGIS processes.

Camden County was selected as the example in order to illustrate the different types of high points that a county can have. The natural publicly-accessible high point in Camden County is not the area with the highest elevation. The highest elevation is on a constructed landfill, and the next highest is a natural elevation on private property. Figure 2 illustrates these three different locations.

The process of determining the locations of these elevations starts with clipping the statewide DEM to the Camden County boundary. The explanation in figure 2 shows that this elevation is 219 feet based on the elevation at the bottom of the color ramp (white bar). This elevation can be either natural or constructed. The process below will show how the determination is made between the nature of the high point and the accessibility at that location.

In order to obtain a precise location for this elevation, low elevations are gradually excluded from the display while zooming in to remaining areas. This is performed by taking the DEM of each county in ArcMap and under the Symbology Property, the values are excluded using the Data Exclusion Properties Form.

The pixel with the highest elevation is found by using the Identify Tool in

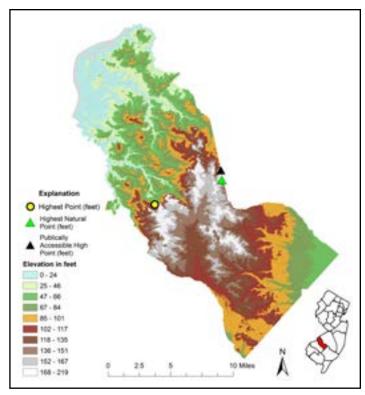


Figure 2. Camden County 10-foot digital elevation model.

ArcGIS (figure 3) and clicking within the area left in the display until that value is displayed in the dialog box (figure 3). The DEM elevations are rounded off to the nearest integer.

The DEM has a resolution of 10 feet, which means that the smallest pixel size is 10 feet. One

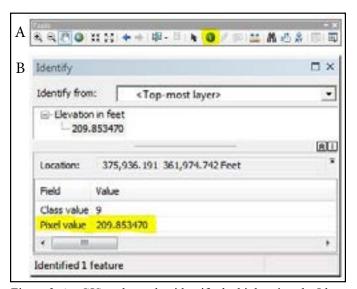


Figure 3. ArcGIS tools used to identify the high point: the Identify Tool (A) and the Result Identify Window (B).

value is assigned to each 10 feet of space. The elevation within that 10 feet might change on the actual earth, however the statewide DEM that was used in this report can only distinguish elevation changes every 10 feet.

The process allows for accurate determination of the highest natural point in each county. Simply selecting the highest number from the color ramp in the explanation is not satisfactory because certain counties have landfills as their overall highest point. Landfills are not considered natural elevations, thus these high points must be ignored in order to find the natural high elevation.

The historic topographic quadrangle map with the 10-foot DEM overlay confirms the elevation in figure 4. The

topographic images are USGS 7.5 minute topographic quadrangle digital raster graphics that were georeferenced to the 1983 North American Datum in state plane coordinate feet. These maps were created in the 1950s and 1960s, with various revisions through the 1990s. Topographic maps are

a good method of verifying the elevation, however the DEM is more accurate, and the highest elevations can be located very quickly.

Figure 4 shows the steps necessary to eliminate elevations to determine the high point. Figure 4A shows Camden County with the lowest 50 feet excluded from the display; figure 4B shows 0-100 feet excluded from the display; figure 4C shows 0-150 feet excluded from the display; and figure 4D shows 0-180 feet excluded from the display. Visually inspecting figure 4D identifies three areas can be identified as having the highest elevations using the color ramp.

Figure 5A-C is a close-up version of area 1 from figure 4D. Figure 5A has 0-217 feet excluded from the display. Tax parcel data identifies this area as the Gloucester County Landfill. Using the

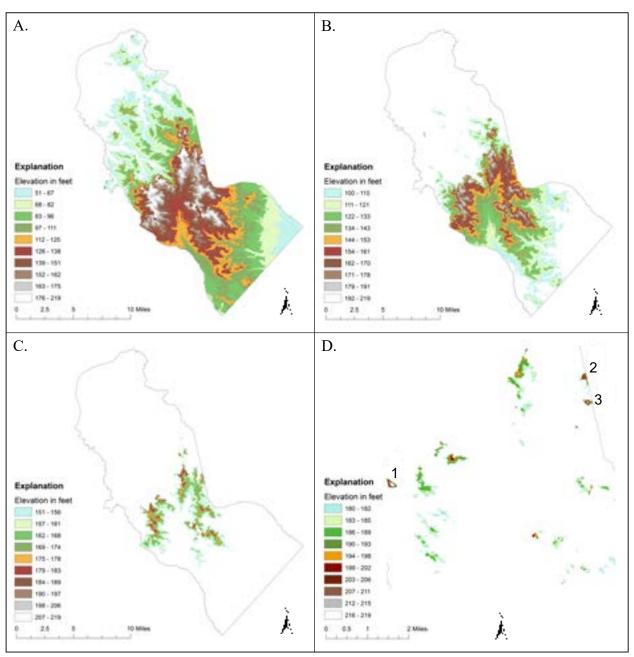


Figure 4. Digital elevation model exclusion method used to determine county high points: (A) elevations greater than 50 feet, (B) elevations greater than 100 feet, (C) elevations greater than 150 feet, (D) elevations greater than 180 feet.

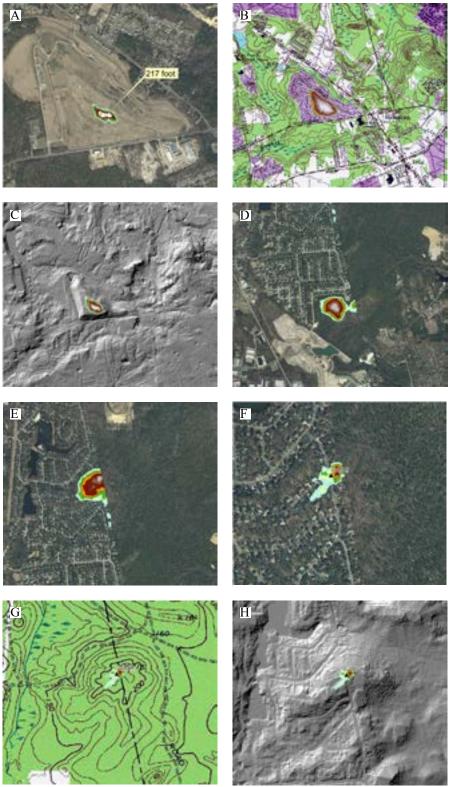
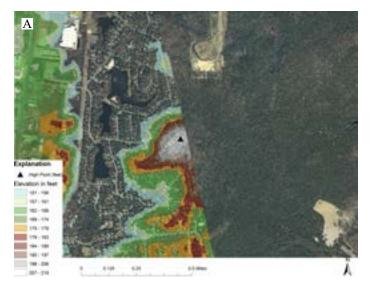


Figure 5. Digital elevation model exclusion method: A-C) Highest constructed elevation in Camden County, aerial, topographic and digital elevation hillshade, D) aerial imagery and elevations of part of Camden County, E-H) highest publicly-accessible natural elevation in Camden County with aerial, topographic, and digital elevation hillshade maps.



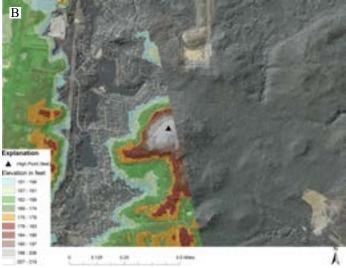


Figure 6. Comparison of using the digital elevation hillshade on the Camden County publicly-accessible high point for visualization: A) depicts the digital elevation model and aerial photograph, B) depicts the digital elevation model, aerial photograph, and digital elevation hillshade.

Identify Tool in ArcGIS and clicking the white area of the elevations that are left of the display, the 219 foot high point is confirmed to be on top of the landfill as shown in figure 5A. The topographic map in figure 5B is the Runnemede quad created in 1967 and revised in 1994. At the time, the elevation was only 175 feet. This area is a constructed elevation, which is not regarded as a true high point in this report because it is not natural. To find the highest natural elevation, the excluded elevations must be added back to the display.

Area 2 from figure 4D was explored next as shown in figure 5D. The highest elevation in this area is 215 feet, however, according to the parcel data this area is on private property. Area 3 from figure 4D was explored as shown in figure 5E. The highest elevation in this area is 215 feet and is on private property on Tenby Chase Drive, Voorhees Township. Using the Identify tool to search Tenby Chase Drive, the highest publicly-accessible point is found at 210 feet. As shown in the next section, the process described here was used for all New Jersey counties.

Figures 5G and 5H were created in order to depict the terrain better for visualization. The digital elevation hillshade displayed in these two figures is a process created using ArcGIS from the digital elevation model. The process creates a shaded relief from the DEM by using light and shadows to create an exaggerated terrain in which hills and valleys are very apparent. Figure 6 shows the difference between viewing the DEM with only the aerial imagery (figure 6A), versus adding the digital elevation hillshade along with the imagery (figure 6B). For display purposes, each map in the County High Points section was created with both the digital elevation model and the digital elevation hillshade.

## **COUNTY HIGH POINTS**

Table 1 lists the elevations of each county's high point, public or private, and the location and municipality of the high point on publicly-accessible land. Easting and northing coordinates of the

Table 1. High points, by county, for natural elevations on private and publicly-accessible land.

	Private Land	Publicly-Accessible Land			
County	Elevation (feet)	Elevation (feet)	Location	Municipality	
Atlantic	147	135	Greenmount Cemetery	Hammonton Town	
Bergen	1,168	1,166	Ramapo Mountain State Forest	Mahwah Twp.	
Burlington	224	212	Greenwood Forest Wildlife Management Area	Woodland Twp.	
Camden	215	210	Tenby Chase Drive	Voorhees Twp.	
Cape May		62	Peaslee Wildlife Management Area	Upper Twp.	
Cumberland		142	County Route 729	Upper Deerfield Twp.	
Essex		691	Hilltop Reservation, Essex County Park	Verona Twp.	
Gloucester	178	177	County Route 654	Monroe Twp.	
Hudson	264	261	Madison Street	Guttenberg Town	
Hunterdon	1,072	1,051	Teetertown Ravine Natural Preserve	Lebanon Twp.	
Mercer		484	Baldpate Mountain, Mercer County Park	Hopewell Twp.	
Middlesex		292	Pinter Lane	South Brunswick Twp.	
Monmouth	374*	349	Phillips Park, Telegraph Hill	Holmdel Twp.	
Morris		1,394	Mahlon Dickerson Reservation	Jefferson Twp.	
Ocean		231	Colliers Mills Wildlife Management Area	Jackson Twp.	
Passaic		1,487	Abram Hewitt State Forest	West Milford Twp.	
Salem	165	164	Swedesboro Road	Upper Pittsgrove Twp.	
Somerset	856	830	Chapin Road	Bernardsville Boro	
Sussex		1,803	High Point State Park Montague Twp.		
Union	565	559	Pinewood Crescent Berkeley Heights Twp.		
Warren		1,608	Worthington State Forest Hardwick Tw		

<sup>\*</sup>Monmouth County has two locations with the highest elevation of 374 feet.

high points were obtained from ArcGis (Table 2). In addition, each publicly-accessible county high point was field visited and photographed. The location of each high point was field checked using a Trimble GPS receiver.

Table 2: Elevations and locations for publicly-accessible high points by county, in state plane feet coordinates.

County	Elevation (feet)	Easting	Northing
Atlantic	135	405,000.00	288,846.17
Bergen	1,166	574,655.67	833,395.72
Burlington	212	513,598.91	359,299.52
Camden	210	375,931.31	362,048.90
Cape May	62	389,018.52	174,098.78
Cumberland	142	294,051.62	247,754.19
Essex	691	559,546.99	731,069.67
Gloucester	177	345,626.64	318,324.76
Hudson	261	627,249.43	715,307.79
Hunterdon	1,051	392,167.31	698,513.99
Mercer	484	381,887.92	542,805.57
Middlesex	292	477,073.45	574,471.95
Monmouth	349	583,829.73	568,304.64
Morris	1,394	471,222.69	796,484.70
Ocean	231	512,662.47	462,377.89
Passaic	1,487	520,323.41	839,066.23
Salem	164	293,603.57	295,634.28
Somerset	830	465,043.16	695,499.49
Sussex	1,803	447,747.51	906,178.42
Union	559	516,336.40	669,583.52
Warren	1,608	339,898.31	788,362.10

## **Atlantic County**

Figure 7 shows elevations in Atlantic County based on the 10-foot DEM. The highest point in Atlantic County is 147 feet in Hammonton Town on private property. The highest point on publicly-accessible land is in Greenmount Cemetery (figure 8) in Hammonton. Its elevation is 135 feet. Figure 9 shows the location on an aerial photo, and figure 10 shows it on topographic map with relevant elevations.

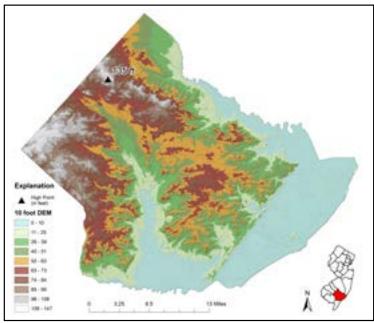


Figure 7. Atlantic County 10-foot digital elevation model and location of publicly-accessible high point



Figure 8. Atlantic County high point on publicly-accessible land, Greenmount Cemetery, Hammonton Town. *Photo by A. Petriman* 

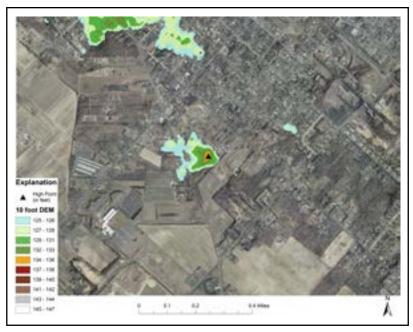


Figure 9. Atlantic County high point on publicly-accessible land and aerial imagery.

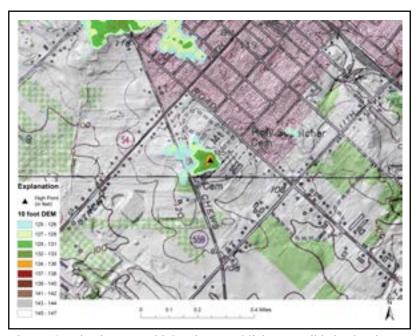


Figure 10. Atlantic County high point on publicly-accessible land and topographic map.

## **Bergen County**

The highest elevation in Bergen County is 1,168 feet located in Mahwah Township on private property. About 95 feet to the west is the highest elevation on public land at 1,166 feet (figures 11 and 12). This state-owned open space is part of Ramapo State Forest, Mahwah Township (figures 13 and 14).

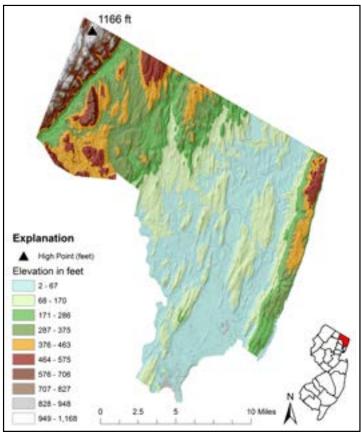


Figure 11. Bergen County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 12. Bergen County high point on publicly-accessible land, Ramapo State Forest, Mahwah Township. *Photo by A. Petriman* 

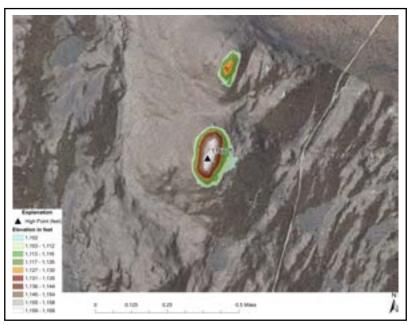


Figure 13. Bergen County high point on publicly-accessible land and aerial imagery.



Figure 14. Bergen County high point on publicly-accessible land and topographic map.

## **Burlington County**

Burlington County's highest elevation is 224 feet; this elevation is on private property in Springfield Township. The highest point on public land is 212 feet as shown in the DEM (figure 15) and photograph (figure 16) in Woodland Township. This area is part of Greenwood Forest Wildlife Management Area shown in figures 17 and 18.

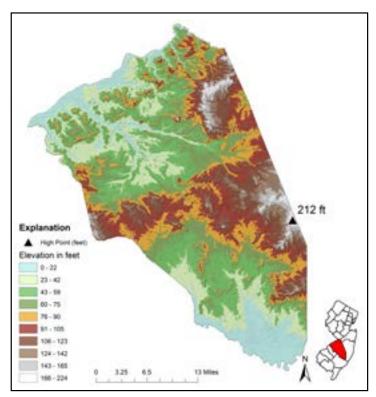


Figure 15. Burlington County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 16. Burlington County high point on publicly-accessible land, Greenwood Forest Wildlife Management Area, Woodland Township. *Photo by A. Petriman* 

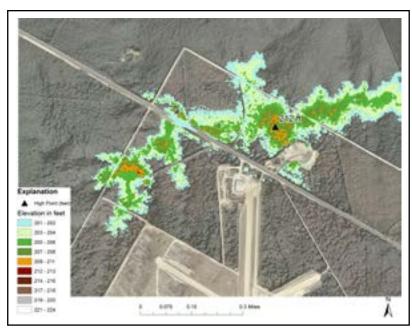


Figure 17. Burlington County high point on publicly-accessible land and aerial imagery.

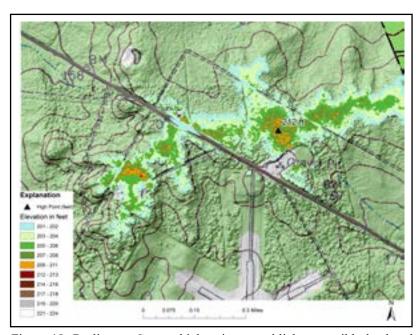


Figure 18. Burlington County high point on publicly-accessible land and topographic map.

#### **Camden County**

Camden County has a high elevation of 219 feet as shown by the color ramp of the DEM in figure 19. It is located in Gloucester Township on the closed GEMS Landfill. Since the landfill is not natural, this high point is excluded.

The highest natural elevation in Camden County is 215 feet in a residential community in Voorhees Township. Public access is not available at this location; therefore, a publicly-accessible high point was determined using the same process of excluding elevation values. The publicly-accessible high point is 210 feet (figure 19) on Tenby Chase Drive, Voorhees Township (figure 20). The aerial photograph is shown in figure 21 and the topographic map in figure 22.

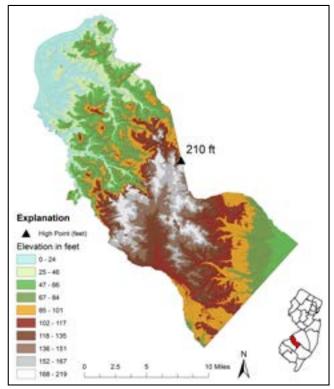


Figure 19. Camden County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 20. Camden County high point on publicly-accessible land, Tenby Chase Drive, Voorhees Township. *Photo by A. Petriman* 

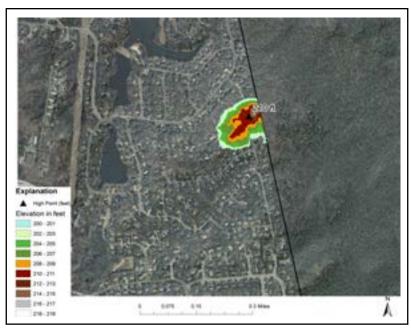


Figure 21. Camden County high point on publicly-accessible land and aerial imagery.

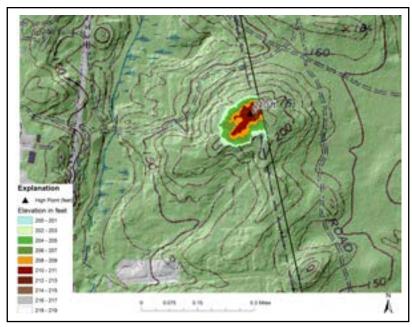


Figure 22. Camden County high point on publicly-accessible land and topographic map.

#### **Cape May County**

The highest elevation in Cape May County is 149 feet. This elevation is on the Cape May County landfill in Upper and Woodbine Townships and is constructed. The highest natural elevation is on public land adjacent to Route 548 in Upper Township near the border with Cumberland County. It is 62 feet (figure 23) on Peaslee Wildlife Management Area, which is state open space land (figure 24). Figures 25 and 26 show an aerial image and topographic map of the area.

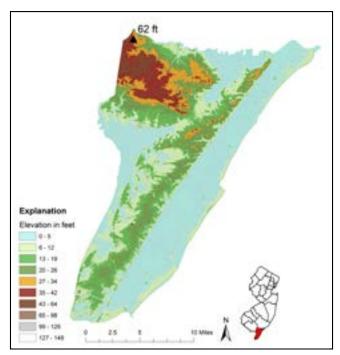


Figure 23. Cape May County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 24. Cape May County high point from County Route 548, Peaslee Wildlife Management Area, Upper Township. *Photo by A. Petriman* 

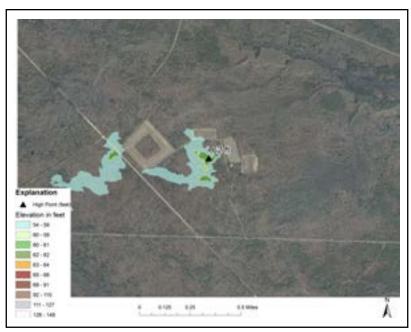


Figure 25. Cape May County high point on publicly-accessible land and aerial imagery.

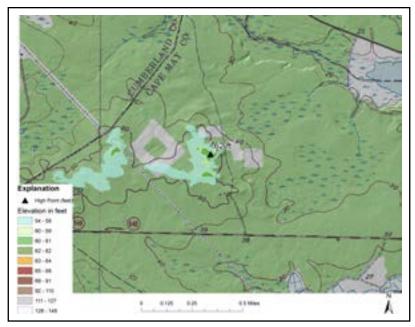


Figure 26. Cape May County high point on publicly-accessible land and topographic map.

## **Cumberland County**

Cumberland County has a high elevation of 165 feet on a sanitary landfill in Deerfield Township. The landfill is not a natural elevation. The highest natural elevation is 142 feet (figure 27). The location is publicly-accessible on County Route 729 (figure 28), near the intersection with County Route 677 in Upper Deerfield Township as shown on figures 29 and 30.

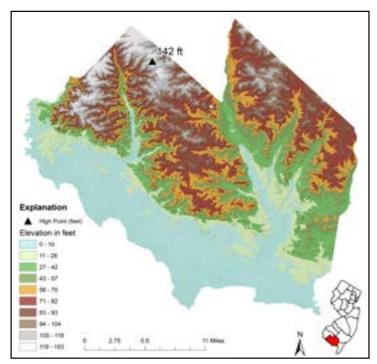


Figure 27. Cumberland County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 28. Cumberland County high point on publicly-accessible land, County Route 729, Upper Deerfield Township. *Photo by A. Petriman* 

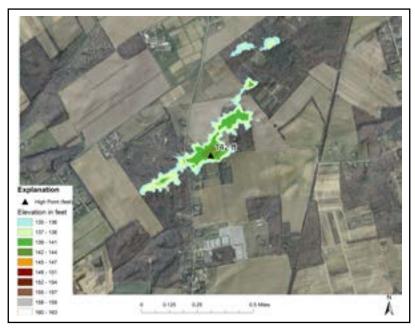
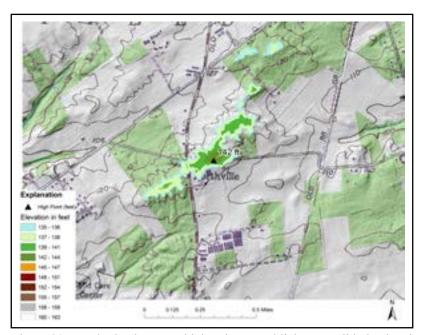


Figure 29. Cumberland County high point on publicly-accessible land and aerial imagery.



 $Figure\ 30.\ Cumberland\ County\ high\ point\ on\ publicly-accessible\ land\ and\ topographic\ map.$ 

## **Essex County**

The highest natural elevation in Essex County is 691 feet and is in Verona Township (figure 31). This site is in Hilltop Reservation, a public county park (figure 32). The location is shown on the aerial image on figure 33 and the topographic map on figure 34.

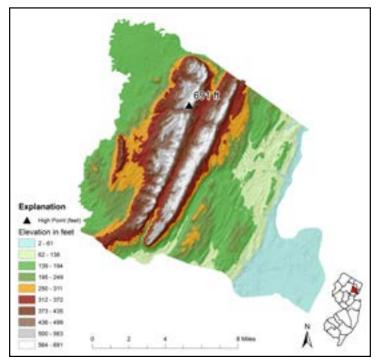


Figure 31. Essex County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 32. Essex County high point on publicly-accessible land, Hilltop Reservation, Verona Township. *Photo by A. Petriman* 

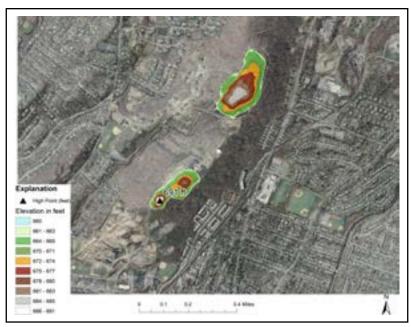


Figure 33. Essex County high point on publicly-accessible land and aerial imagery.

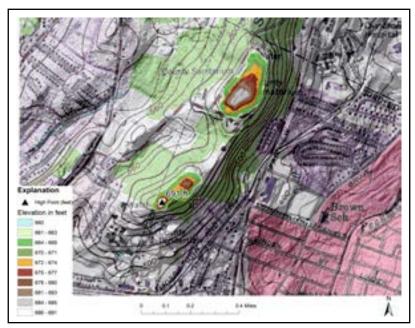


Figure 34. Essex County high point on publicly-accessible land and topographic map.

#### **Gloucester County**

The highest elevation in Gloucester County is 249 feet, which was obtained from the DEM. This elevation is in Woolwich Township on the county landfill. Because this is not a natural elevation, it was not included as a high point. The natural high point in Gloucester County is 178 feet on private property in Monroe Township. Nearby, on Route 654, the elevation is lower by 1 foot (figure 35). This is the highest publicly-accessible high point on public land (figure 36). The location is on the aerial image shown in figure 37 and on the topographic map in figure 38.

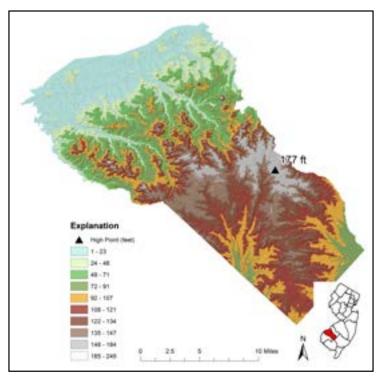


Figure 35. Gloucester County 10-foot digital elevation model and location of publicly-accessible high point.

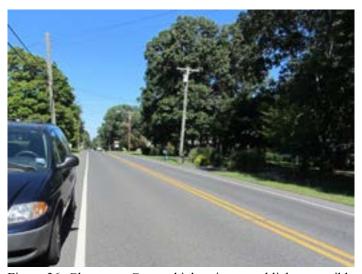


Figure 36. Gloucester County high point on publicly-accessible land, County Route 654, Monroe Township. *Photo by A. Petriman* 

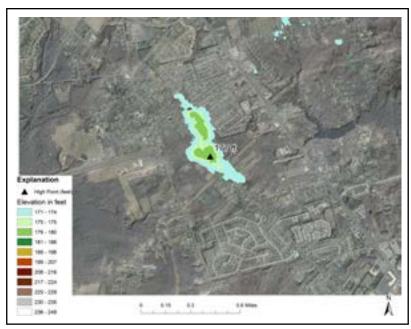


Figure 37. Gloucester County high point on publicly-accessible land and aerial imagery.

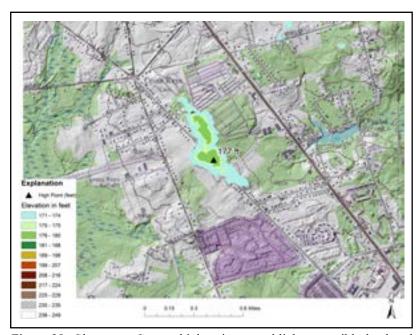


Figure 38. Gloucester County high point on publicly-accessible land and topographic map.

## **Hudson County**

The highest natural elevation in Hudson County is 264 feet in the Town of Guttenberg between Polk Street and 70<sup>th</sup> Street, on private property. The highest natural elevation on public land is 261 feet (figure 39) in the Town of Guttenberg on Madison Street as determined by the DEM and shown in figure 40. The publicly-accessible high point is located about 300 feet away from the absolute highest point shown in detail in figures 41 and 42.

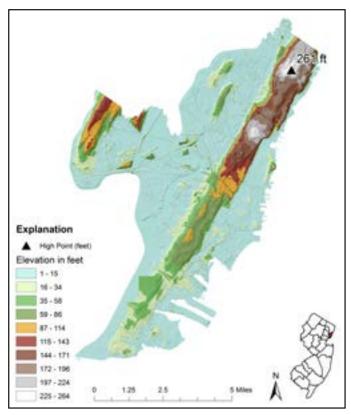


Figure 39. Hudson County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 40. Hudson County high point on publicly-accessible land, Madison Street, Guttenberg Town. *Photo by A. Petriman* 

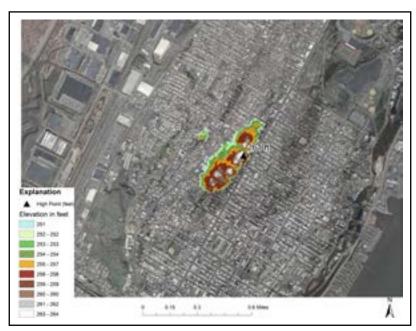


Figure 41. Hudson County high point on publicly-accessible land and aerial imagery.

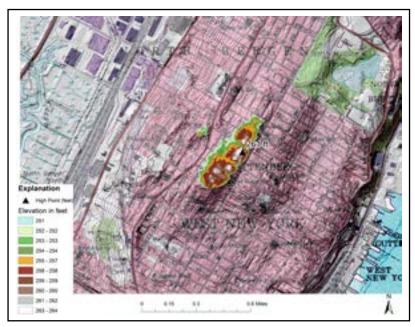


Figure 42. Hudson County high point on publicly-accessible land and topographic map.

#### **Hunterdon County**

The highest point in Hunterdon County is 1,072 feet. It is in Lebanon Township on private property. The highest natural elevation on public land is 1,051 feet in Lebanon Township near Pleasant Grove Road (figure 43) as shown by the DEM. It is part of Teetertown Ravine Natural Preserve (figure 44). Figures 45 and 46 show the area on aerial and topographic map.

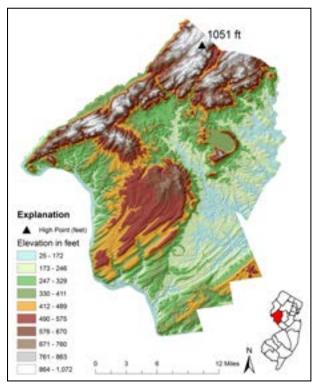


Figure 43. Hunterdon County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 44. Hunterdon County high point on publicly-accessible land, Teetertown Ravine Natural Preserve, Lebanon Township. *Photo by A. Petriman* 

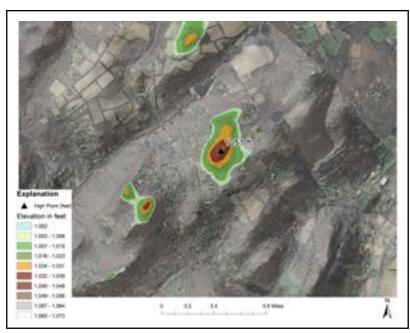


Figure 45. Hunterdon County high point on publicly-accessible land and aerial imagery.

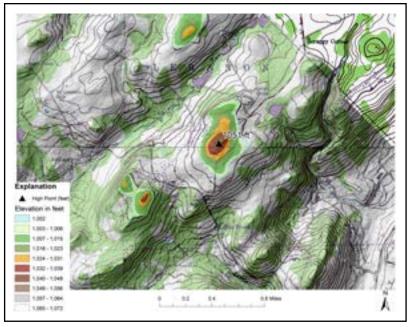


Figure 46. Hunterdon County high point on publicly-accessible land and topographic map.

# **Mercer County**

The highest elevation in Mercer County, 484 feet (figure 47), is on Baldpate Mountain in Hopewell Township (figure 48). Figures 49 and 50 show the aerial and topographic maps of the region.

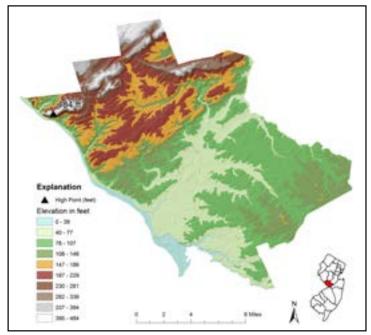


Figure 47. Mercer County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 48. Mercer County high point on publicly-accessible land, Baldpate Mountain, Hopewell Township. *Photo by A. Petriman* 

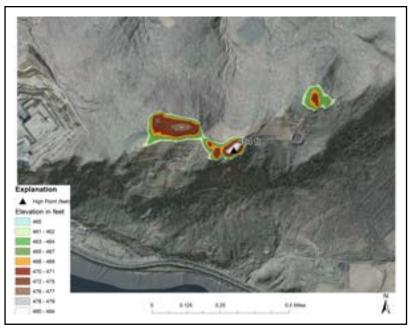


Figure 49. Mercer County high point on publicly-accessible land and aerial imagery.

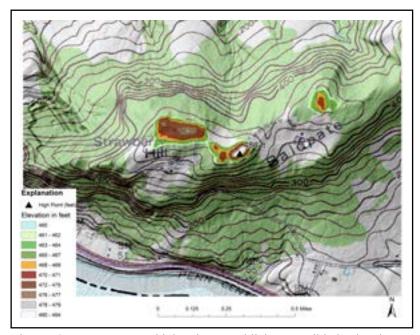


Figure 50. Mercer County high point on publicly-accessible land and topographic map.

## **Middlesex County**

The DEM (figure 51) shows the highest elevation in Middlesex County as 292 feet. It is located in South Brunswick Township and can be accessed from Pinter Lane. In between residences are two parcels of land that belong to the township and are labeled as open space (figure 52). The yellow outlines in figures 53 and 54 show the boundary of this open space. The topographic map in figure 54 shows the surrounding elevation.

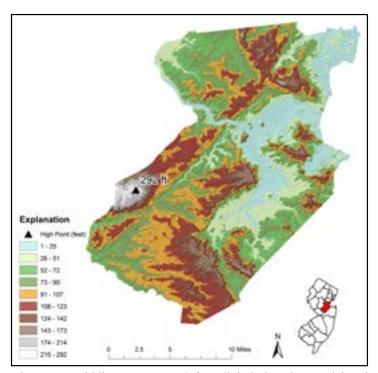


Figure 51. Middlesex County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 52. Middlesex County high point on publicly-accessible land, near Pinter Lane, South Brunswick Township. *Photo by A. Petriman* 

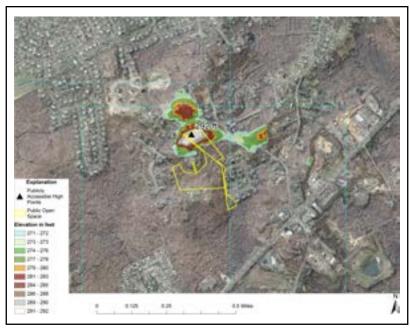


Figure 53. Middlesex County high point on publicly-accessible land and aerial imagery.

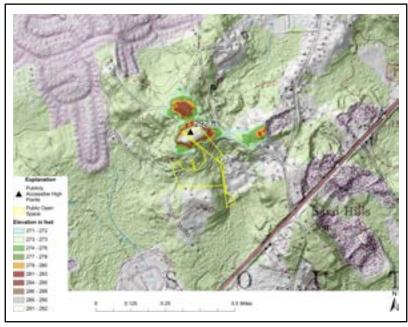


Figure 54. Middlesex County high point on publicly-accessible land and topographic map.

#### **Monmouth County**

The highest natural elevation in Monmouth County is 374 feet and it is located in two distinct areas, one in Marlboro Township, and the other in Holmdel Township on Crawford Hill. Both are private property. The highest point on public land is 349 feet (figure 55) in Phillips Park on Telegraph Hill (figure 56). The property belongs to the Township of Holmdel. Aerial imagery and topographic map of the area are shown in figure 57 and 58, respectively.

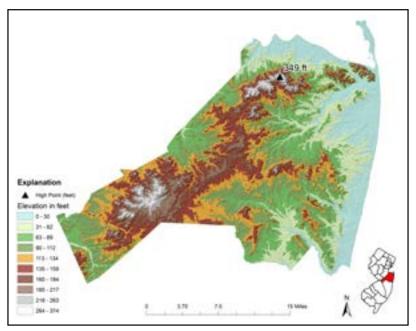


Figure 55. Monmouth County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 56. Monmouth County high point on publicly-accessible land, Phillips Park, Holmdel Township. *Photo by A. Petriman* 



Figure 57. Monmouth County high point on publicly-accessible land and aerial imagery.

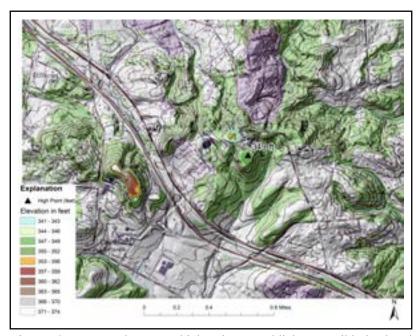


Figure 58. Monmouth County high point on publicly-accessible land and topographic map.

#### **Morris County**

The highest natural elevation of 1,394 feet in Morris County is in Jefferson Township on the Mahlon Dickerson Reservation (figure 59). This is public property belonging to the Morris County Park Commission. A plaque marking the high point exists on the White Trail, about 280 feet east of the high point determined by the methodology described in this report (figure 60). Aerial imagery (figure 61) and a topographic map (figure 62) show the surrounding area.

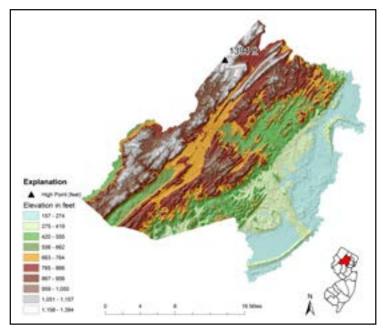


Figure 59. Morris County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 60. Plaque marking the Morris County high point on publicly-accessible land, Mahlon Dickerson Reservation, Jefferson Township. *Photo by A. Petriman* 

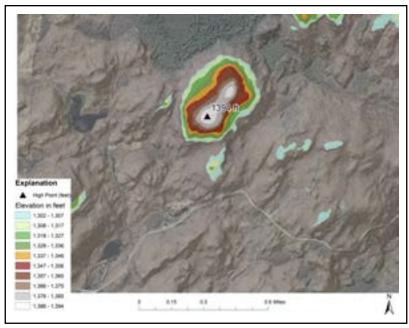


Figure 61. Morris County high point on publicly-accessible land and aerial imagery.

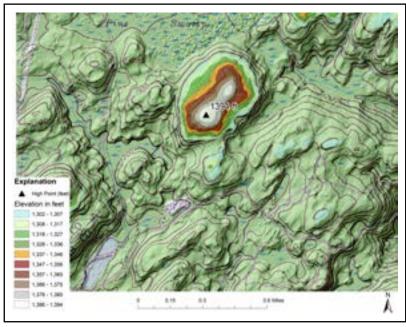


Figure 62. Morris County high point on publicly-accessible land and topographic map.

### **Ocean County**

The highest elevation in Ocean County is 231 feet on state-owned land in Jackson Township as determined by the DEM (figure 63). The high point is located in the Colliers Mills Wildlife Management Area near North Stump Tavern Road (figure 64). The aerial imagery (figure 65) and topographic map (figure 66) show the surrounding area.

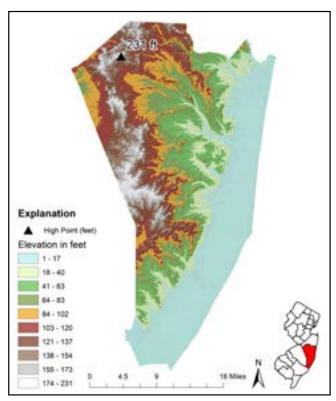


Figure 63. Ocean County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 64. Ocean County high point on publicly-accessible land, Colliers Mills Wildlife Management Area, Jackson Township. *Photo by A. Petriman* 

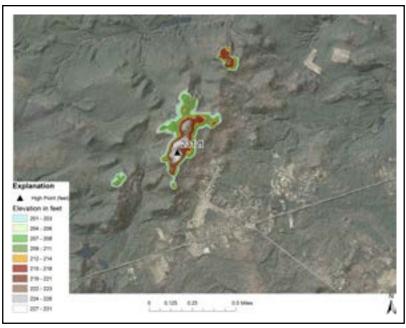


Figure 65. Ocean County high point on publicly-accessible land and aerial imagery.

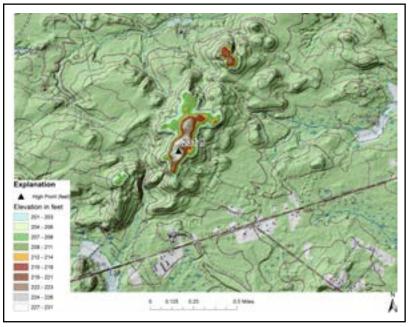


Figure 66. Ocean County high point on publicly-accessible land and topographic map.

### **Passaic County**

The highest elevation in Passaic County is 1,487, located in West Milford Township (figure 67). The area is part of Abram Hewitt State Forest (figure 68), which is public land with hiking trails. Figures 69 and 70 show the aerial imagery and topographic maps of the area.

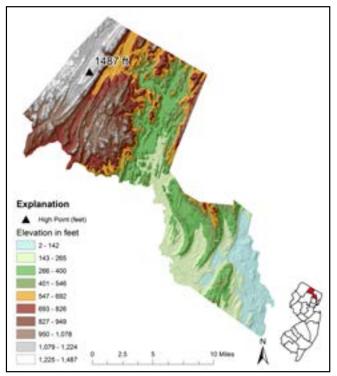


Figure 67. Passaic County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 68. Passaic County high point on publicly-accessible land, Terrace Pond, Abram Hewitt State Forest, West Milford Township. *Photo by A. Petriman* 

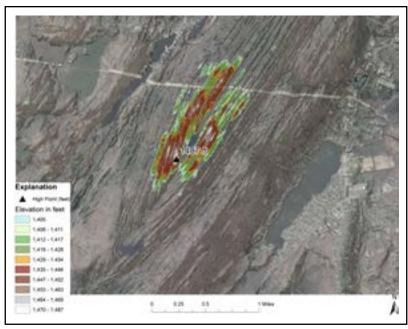


Figure 69. Passaic County high point on publicly-accessible land and aerial imagery.

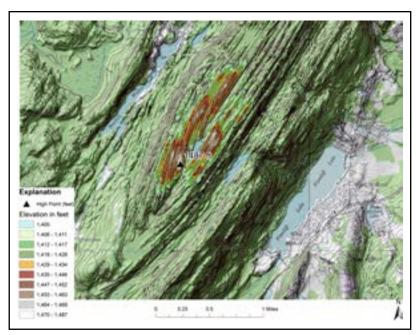


Figure 70. Passaic County high point on publicly-accessible land and topographic map.

## **Salem County**

The highest elevation in Salem County is 176 feet and is located at a landfill in Upper Pittsgrove Township. This elevation is not a natural elevation. The highest natural point is 165 feet in Upper Pittsgrove Township on private property. On Swedesboro Road, 540 feet away from the highest natural point, is the highest publicly-accessible elevation, which is 164 feet (figures 71 and 72). Figures 73 and 74 show the aerial imagery and topographic map of the natural publicly-accessible high point of Salem County.

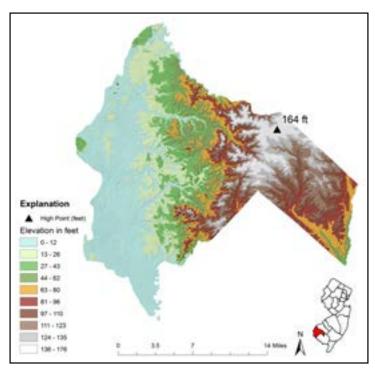


Figure 71. Salem County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 72. Salem County high point on publicly-accessible land, Swedesboro Road, Upper Pittsgove Township. *Photo by A. Petriman* 

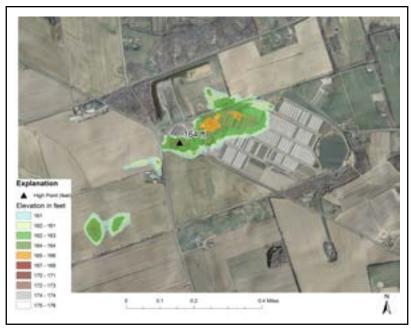


Figure 73. Salem County high point on publicly-accessible land and aerial imagery.

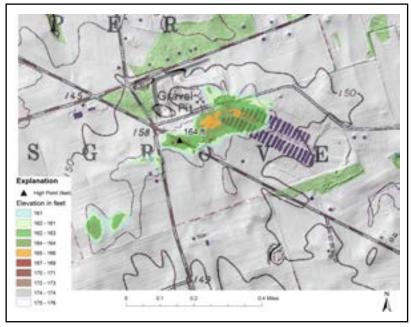


Figure 74. Salem County high point on publicly-accessible land and topographic map.

#### **Somerset County**

The highest natural point in Somerset County is 856 feet in Bernardsville Borough on private land as shown by the DEM. The highest point on publicly-accessible land is 830 feet and is located about 735 feet away from the absolute highest point (figure 75). The location is in Bernardsville Borough on Chapin Road (figure 76) and is shown in the aerial image (figure 77) and the topographic map (figure 78).

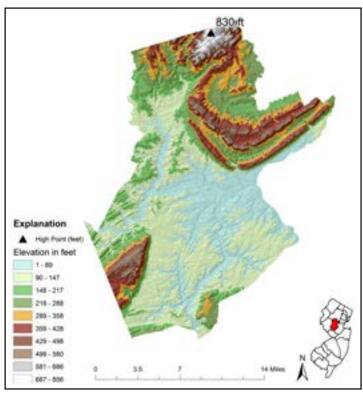


Figure 75. Somerset County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 76. Somerset County high point on publicly-accessible land, Chapin Road, Bernardsville Borough. *Photo by A. Petriman* 

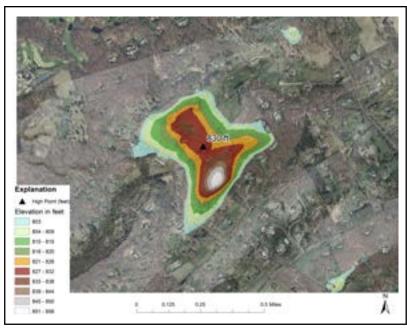


Figure 77. Somerset County high point on publicly-accessible land and aerial imagery.

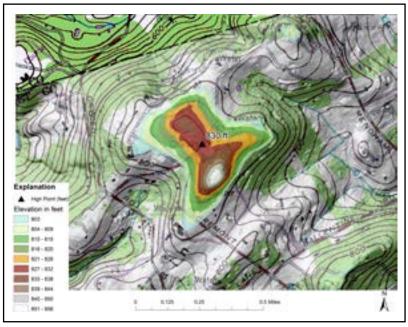


Figure 78. Somerset County high point on publicly-accessible land and topographic map.

### **Sussex County**

The highest elevation in Sussex County 1,803 feet (figure 79) and is located in High Point State Park, Montague Township (figure 80). This is New Jersey's highest elevation. A 220 foot tall obelisk built in honor of war veterans (see cover photo) is nearby. Figures 81 and 82 show the aerial photography and topographic map of the region.

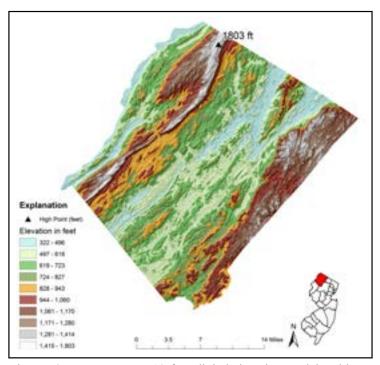


Figure 79. Sussex County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 80. Sussex County high point on publicly-accessible land, High Point State Park, MontagueTownship. *Photo by A. Petriman* 

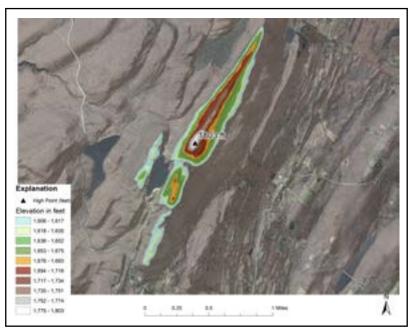


Figure 81. Sussex County high point on publicly-accessible land and aerial imagery.

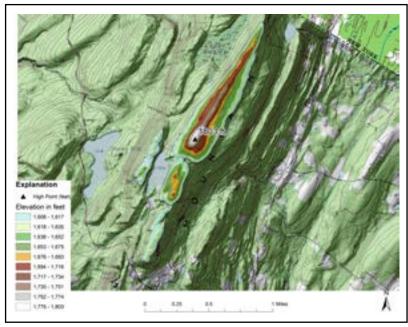


Figure 82. Sussex County high point on publicly-accessible land and topographic map.

## **Union County**

The highest natural elevation in Union County is 565 feet in Berkeley Heights Township. It is in a residential area on private property. The highest elevation on public land (figure 83) is 120 feet away on Pinewood Crescent in Berkeley Heights, at 559 feet above sea level (figure 84). Figures 85 and 86 show the aerial photography and topographic map of the region.

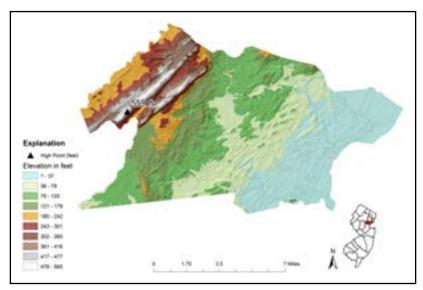


Figure 83. Union County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 84. Union County high point on publicly-accessible land, Pinewood Crescent, Berkeley Heights Township. *Photo by A. Petriman* 

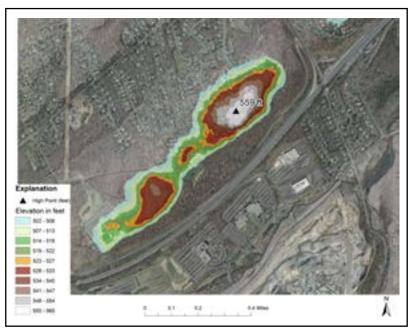


Figure 85. Union County high point on publicly-accessible land and aerial imagery.

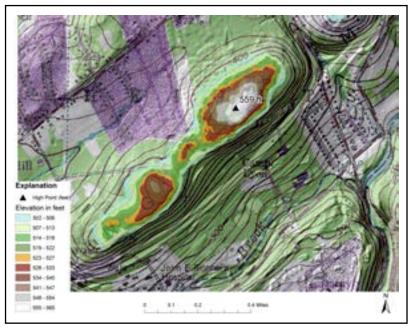


Figure 86. Union County high point on publicly-accessible land and topographic map.

### **Warren County**

The highest natural elevation in Warren County is 1,608 feet in Worthington State Forest, Hardwick Township (figures 87 and 88). Warren County has the second highest elevation in the state. Figure 89 shows the aerial imagery of the area and figure 90 shows a topographic map of the area.

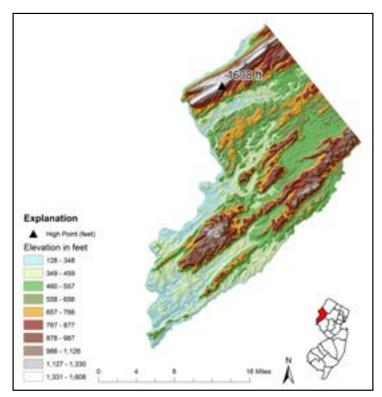


Figure 87. Warren County 10-foot digital elevation model and location of publicly-accessible high point.



Figure 88. Warren County high point on publicly-accessible land, Worthington State Forest, Hardwick Township. *Photo by A. Petriman* 

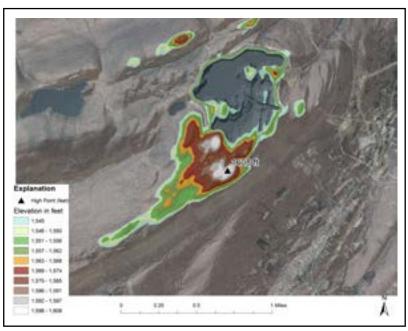


Figure 89. Warren County high point on publicly-accessible land and aerial imagery.

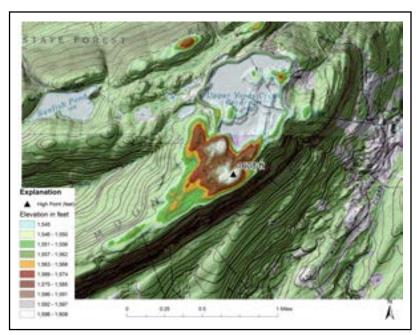


Figure 90. Warren County high point on publicly-accessible land and topographic map.

### **APPENDIX A**

# Digital data sources

New Jersey Department of Environmental Protection www.nj.gov/dep/gis/listall.html

county boundaries, state/county owned open space areas, hillshade grid

New Jersey Department of Transportation www.nj.gov/transportation/gis/data.shtm

roads

New Jersey Geographic Information Network njgin.state.nj.us/NJ\_NJGINExplorer/DataDownloads.jsp

Digital Elevation Model, aerial imagery

New Jersey Geological and Water Survey www.njgeology.org/geodata/dgs99-1.htm

topographic quadrangles